AMENDMENTS

In the Claims:

1. (Canceled)

2. (Currently amended) The image reading method for obtaining a shading correction coefficient as defined in Claim [[1]] 4, wherein

the average value of readings from each image sensor is an average value of readings obtained by once reading a reference plate in the main scanning direction.

3. (Currently amended) The image reading method for obtaining a shading correction coefficient as defined in Claim [[1]] 4, wherein

the average value of readings from each image sensor is an average value of readings obtained by reading the reference plate in the main scanning direction plural times.

4. (Original) An image reading method for obtaining a shading correction coefficient for correcting image data obtained by reading a document image, comprising the steps of:

reading a reference plate in a main scanning direction plural times at different positions in a sub-scanning direction perpendicular to the main scanning direction with use of a plurality of image sensors aligned in the main scanning direction;

calculating difference per image sensor between a maximum value among a plurality of readings from each image sensor and an average value of readings from each image sensor; and

obtaining the shading correction coefficient by adding a value corresponding to the difference of each image sensor to a correction coefficient so that the maximum value of each image sensor becomes a specified image level.

5. (Original) An image reading method for obtaining a shading correction coefficient for correcting image data obtained by reading a document image, comprising the steps of:

reading a reference plate in a main scanning direction plural times at different positions in a sub-scanning direction perpendicular to the main scanning direction with use of a plurality of image sensors aligned in the main scanning direction;

calculating difference between an average value of maximum values among a plurality of readings from each image sensor and an average value of readings from each image sensor; and

obtaining the shading correction coefficient by modifying a correction coefficient for correcting the image data so that the maximum value of each image sensor becomes a specified image level in correspondence to the difference of each image sensor.

6. (Original) The image reading method for obtaining a shading correction coefficient as defined in Claim 5, wherein

the average value of readings from each image sensor is an average value of readings obtained by once reading a reference plate in the main scanning direction.

7. (Original) The image reading method for obtaining a shading correction coefficient as defined in Claim 5, wherein

the average value of readings from each image sensor is an average value of readings obtained by reading the reference plate in the main scanning direction plural times.

8. (Original) An image reading device for obtaining a shading correction coefficient for correcting image data obtained by reading a document image, comprising:

a plurality of image sensors aligned in a main scanning direction;

a calculation section for reading a reference plate in the main scanning direction plural times at different positions in a sub-scanning direction perpendicular to the main scanning direction with use of the image sensors and calculating difference between an average value of maximum values among a plurality of readings from each image sensor and an average value of readings from each image sensor;

an operation section for obtaining the shading correction coefficient by modifying a correction coefficient for correcting the image data so that the maximum value of each image sensor becomes a specified image level in correspondence to the difference of each image sensor; and

a correction section for correcting image data obtained by reading a document image with use of the image sensors through the shading correction coefficient.

9. (Original) An image reading method for obtaining a shading correction coefficient for correcting image data obtained by reading a document image, comprising the steps of:

reading a reference plate in a main scanning directing plural times at different positions in a sub-scanning direction perpendicular to the main scanning direction with use of a plurality of image sensors aligned in the main scanning direction;

calculating difference between an average value of maximum values among a plurality of readings from each image sensor and an average value of readings from each image sensor; and

obtaining the shading correction coefficient by adding a value corresponding to the difference of each image sensor to a correction coefficient so that the maximum value of each image sensor becomes a specified image level.

10. (Original) An image reading device, comprising:

a plurality of image sensors aligned in a main scanning direction;

calculation means for reading a reference plate in the main scanning direction plural times at different positions in a sub-scanning direction perpendicular to the main scanning direction with use of the image sensors and calculating difference per image sensor between a maximum value among a plurality of readings from each image sensor and an average value of readings from each image sensor;

amplification means for amplifying image signals read by the image sensors; and

gain adjustment means for changing an amplification factor of the amplification means in correspondence to the calculated difference.

11. (Original) An image reading device, comprising:

a plurality of image sensors aligned in a main scanning direction;

calculating means for reading a reference plate in the main scanning direction plural times at different positions in a sub-scanning direction perpendicular to the main scanning direction with use of the image sensors and calculating difference between an average value of maximum values among a plurality of readings from each image sensor and an average value of readings from each image sensor;

amplification means for amplifying image signals read by the image sensors; and

gain adjustment means for changing an amplification factor of the amplification means in correspondence to the calculated difference.

12. (Original) An image reading device, comprising:

amplification means for amplifying signals representing images of a reference intensity plate or an image document with a specified amplification factor to provide readings of the reference intensity plate or readings of the image document;

peak value calculation means for calculating a peak value of the readings of the reference intensity plate;

storage means for storing the peak value;

average value calculation means for calculating an average value of the readings of the reference intensity plate;

difference data calculation means for calculating difference data between the peak value and the average value;

compensation coefficient setting means for setting a compensation coefficient through use of the peak value stored in the storage means as shading compensation reference data;

compensation means for compensating readings of the image document through use of the compensation coefficient; and

gain adjustment means for changing the amplification factor of the amplification means according to the difference data so as to make the amplification factor for use in the case where the amplification means amplifies signals representing images of the reference intensity plate different from the amplification factor for use in the case where the amplification means amplifies signals representing images of the image document.